technocamps Playground computing

Robotic Board game

Content:

What is an if statement?

If statements are used **IF** a condition is met. For example:

if my phone rings
    answer it

else (if it is not ringing)
    do not answer it.

If the condition is met (my phone ringing) an action is performed.

Robotic activity explained:

This activity uses the traditional board game setting with a twist to teach pupils about **if statements** and how they are used.

This activity is ideal for groups, or pairs.

For this activity, each pupil will need to draw their own robot in a blank box (page 5), you will need to print off the board game (page 3) for each group/pair, and a dice for each group/pair.

Pupils decide the rules by finishing the if statements as seen on page 4. Some examples:

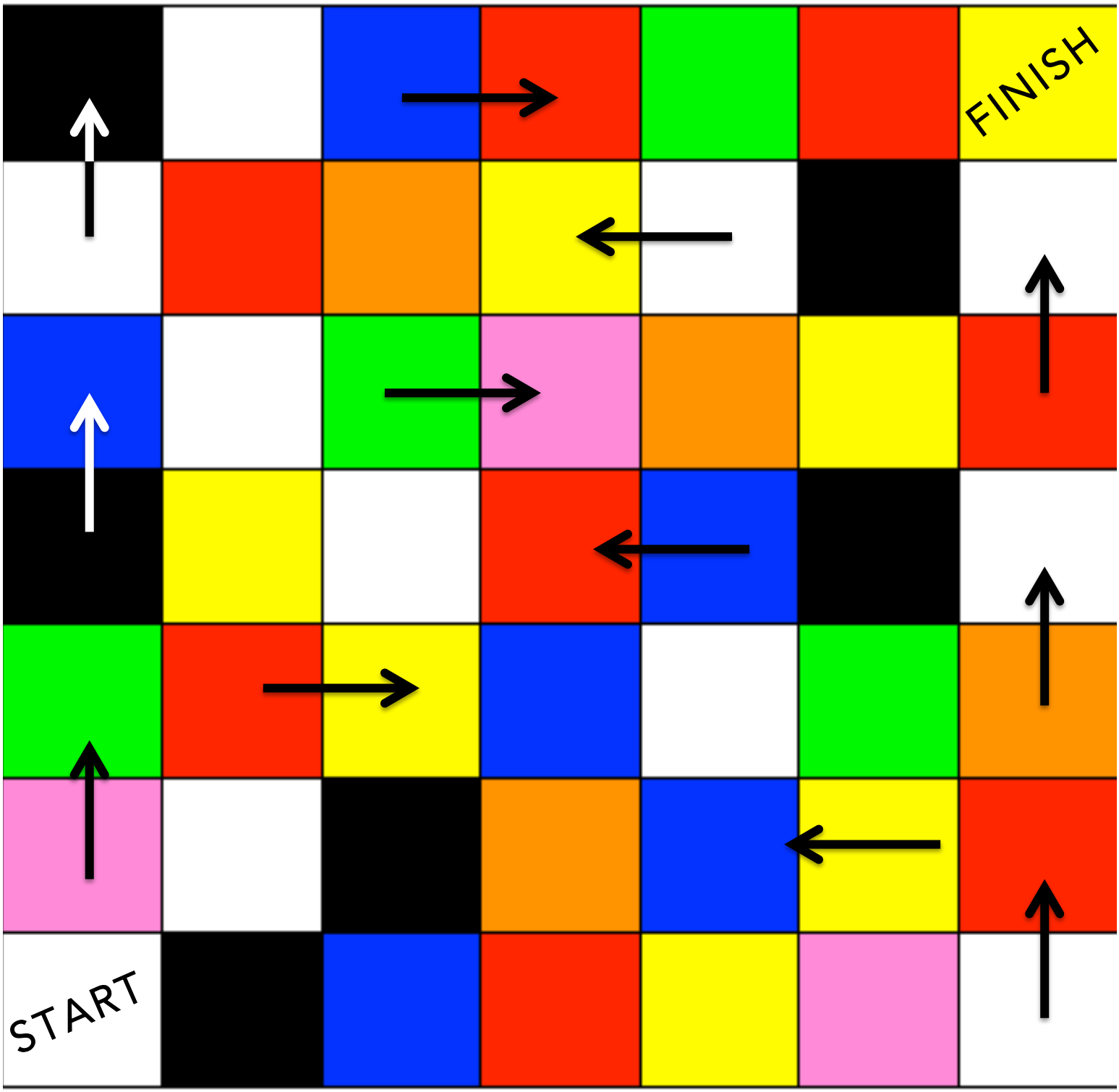
- If your robot lands on yellow add 10 points
- If your robot lands on green miss a turn
- If your robot lands on blue act like a zombie until it is your turn again

The ideas are unlimited and will inspire the pupils to be creative with their "rules".

Like traditional board games, each person rolls the dice and moves their character on accordance to the number shown on the dice. The person to get to the finish square is the winner.

technocamps Playground computing

Robotic Board game



technocamps Playground computing

Rules of our game:

IF robot lands on red:.....

IF robot lands on black: .....

IF robot lands on blue: .....

IF robot lands on white: .....

IF robot lands on yellow: .....

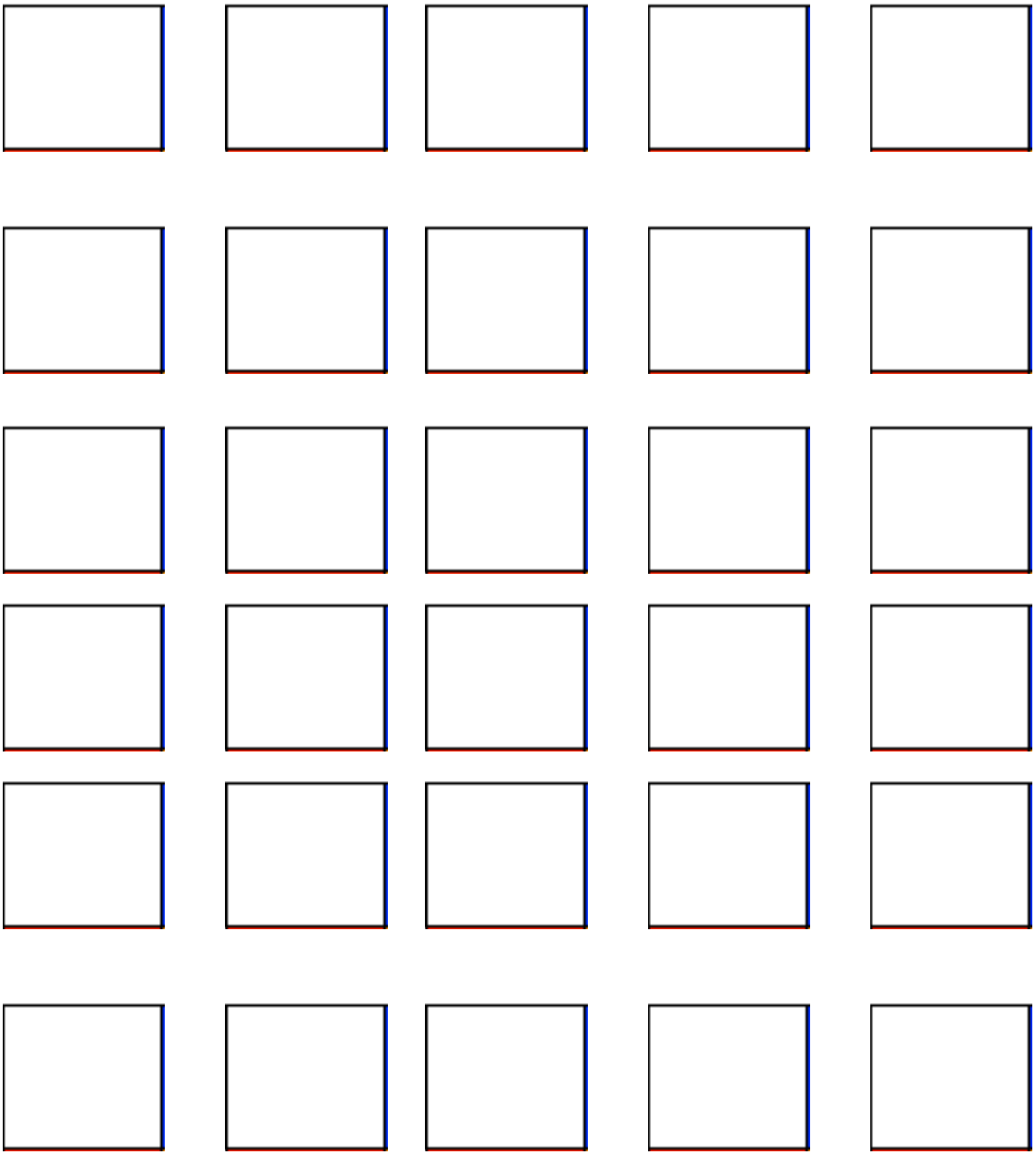
IF robot lands on pink: .....

IF robot lands on orange: .....

Playground computing

Squares to draw robot characters:

Each pupil will need a square to draw their robot in. As a class you could see what ideas some pupils have and ask them what jobs their robots do.



technocamps Playground computing

Future ideas:

The board game above is a very basic idea. In groups the class could create a theme like a jungle:

- if robot meets tiger, robot must miss a go.
- If robot lands on the boat, robot is driven to the finish.

Or to incorporate healthy eating, have the board set out with different types of food.

- If robot lands on a chocolate bar they must miss a go.
- If the robot lands on an apple the robot has an energy boost and gets another turn.

Ideas are limitless, it will give your pupils a chance to be creative and design their very own game whilst learning fundamental computer science terms

Skills used:

- Numeracy
- Team work
- Creativity

technocamps Playground computing

Robotic board game resources:

We hope you use these resources in your classroom and hope to inspire you to develop and create your own imaginative ideas and activities.

If you have any questions, or would like any future assistance please email

sarah.lewis@technocamps.com

Prifysgol Abertawe Swansea University Nesta nominet trust mozilla LIFE Programme